

LIST OF CLAIMS

1. (Currently Amended) A biochip scanner device for simultaneous scanning and analysis comprising:

a light source, which emits a light beam;

a light processing unit, which focuses the light beam onto a biochip to excite fluorescence from a fluorescent target on the biochip;

a filter, which filters off the light beam from a light source;

a photomultiplier tube, which detects and converts the fluorescence into an electrical signal; and

an output device, which comprises at least one set of parameters for directly reading the electrical signal detected by the photomultiplier tube without converting outputs/displays the electrical signal detected by the photomultiplier tube into image data.

2. (Original) The biochip scanner device according to claim 1, wherein the light processing unit comprises:

a beam splitter for redirecting the light beam through a focusing lens, which focuses the light beam onto the biochip and excites fluorescence from a fluorescent target on the biochip.

3. (Original) The biochip scanner device according to claim 2, wherein the light processing unit further comprises another focusing lens between the light source and the beam splitter to enhance the focus effect.
4. (Original) The biochip scanner device according to claim 1 further comprising a platform for holding the biochip and moving in two different directions.
5. (Currently Amended) The biochip scanner device according to claim 4 ~~further comprising a computer~~, wherein the output device is a computer comprises at least one set of parameters for controlling the directions of movement of the platform.
6. Cancelled.

7. (Currently Amended) The biochip scanner device according to claim 1 6, wherein the output device ~~computer~~ comprises at least one set of parameters for converting the signal detected by the photomultiplier tube into image data.
8. (Currently Amended) A biochip scanner device for simultaneous scanning and analysis comprising:
- a light source, which emits a light beam;
- a beam splitter for redirecting the light beam through a focusing lens, which focuses the light beam onto the biochip and excites fluorescence from a fluorescent target on the biochip;
- a filter, which filters off the light beam from a light source;
- a photomultiplier tube, which detects and converts the fluorescence into an electrical signal; and
- an output device, which comprises at least one set of parameters for directly reading the electrical signal detected by the photomultiplier tube without converting ~~outputs/displays~~ the

electrical signal ~~detected by the photomultiplier tube~~ into image data.

9. (Original) The biochip scanner device according to claim 8 further comprising another focusing lens between the light source and the beam splitter to enhance the focus effect.
10. (Original) The biochip scanner device according to claim 8 further comprising a platform for holding the biochip and moving in two different directions.
11. (Currently Amended) The biochip scanner device according to claim 8 10 ~~further comprising a computer~~, wherein the output device is a computer comprises at least one set of parameters for controlling the directions of movement of the platform.
12. Canceled.

13. (Currently Amended) The biochip scanner device according to claim 8 ~~12~~, wherein the ~~computer~~ output device comprises at least one set of parameters for converting the signal detected by the photomultiplier tube into image data.
14. (New) A method of simultaneously scanning and analyzing samples on a biochip comprising the steps of:
- (a) placing a biochip having fluorescent targets on a platform of a biochip scanner device according to claim 1;
 - (b) scanning the biochip with a light beam from a laser source, wherein the light beam passes through focusing lens;
 - (c) exciting the fluorescence with the light beam;
 - (d) detecting the fluorescence with a photomultiplier tube;
 - (e) converting the fluorescence into an electrical signal;
 - (f) transmitting the electrical signal to an output device;
and
 - (g) outputting data on the output device.